DOCUMENT RESUME

ED 307 854 IR 013 820

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TITLE Learner Preferences for Typeface (Font) and Leading in Print Materials.
PUB DATE Feb 89
NOTE 52p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Design Preferences; Higher Education; *Instructional Materials; Layout (Publications); Material Development; *Readability; *Student Attitudes; *Visual Stimuli
IDENTIFIERS *Printed Materials; *Typeface

ABSTRACT

This study examined learner preference for different typefaces and vertical spacing or leading in print materials used in independent study university extension courses. For several years, these materials were produced using 12-point Times font on the default leading provided by Microsoft Word 3.0 (approximately 12-point line). A questionnaire provided students with five font choices with three different levels of leading. Thurstone scales were constructed to determine the relative popularity of the fonts and leading, and the results showed that students preferred Bookman font on a 13-point line by a wide margin over all other combinations. The currently used Times font at default leading was found to be low on the preference scale. Although the results of this study should not be over-interpreted, it is suggested that print-based materials are preferred by learners when they are produced on a 13 point line of 26 picas length (approximately 4.25 inches), with an extra 6-point leading after paragraphs. It is recommended that all new courses and revisions of existing courses be produced in this manner. (EW)

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Learner Preferences for Typeface (Font) and Leading in Print Materials

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February, 1989

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Executive Summary

There is considerable evidence in the literature that characteristics such as font type and size (within limits) do not affect legibility. There is also evidence, however, that those same characteristics do affect learners/readers in other ways. More specifically, readers show statistically significant differences in their preferences for certain fonts. There is some suggestion in the literature that what learners prefer is not always what they learn best from, but so long as learner preferences do not actually hamper learning, perhaps they should not be ignored. Some researchers have suggested that although each variable may in itself have only a small measurable effect, taken together several variables may have considerable affective effect, which may enhance or hamper learning. In other words, the argument goes, if no detriment to learning can be attributed to font choice, why not provide learners with what they prefer on the expectation that positive affective reaction is generally beneficial to learning?

The Part-Time Degree Studies Office at the Division of Extension and Community Relations of the University of Saskatchewan has for several years produced independent studies courses using 12-point Times font on the default leading provided by Microsoft® Word 3.0 (approximately 12-point line).

This study used questionnaires to determine learner preferences for fonts to be used for print-based instructional materials. Students were asked to choose which of each of all possible pairs of five fonts with three different levels of leading (vertical spacing) they preferred. Thurstone scales were constructed to determine the relative popularity of the fonts and leading.

Bookman font on a 13-point line emerged as the most preferred font/leading combination; it was clearly ahead of all other combinations (see Figure 14, p. 16).

Although the results of this study ought not to be over-interpreted, there is a suggestion that print-based materials are preferred by learners when they are done in 10-point Bookman font on a 13-point line of 26 picas length (approximately 4 1/4"), with an extra 6-point leading after paragraphs.

In light of the results of this study, it is recommended that the Part-Time Degree Studies Office at the University of Saskatchewan re-evaluate its present practice of using Times font at default leading, which emerged low on the preference scale. Although it would probably be prohibitively expensive to convert all existing courses from Times to Bookman, all new courses should be produced in Bookman, and serious consideration should be given to font conversion when existing courses are revised in the future.

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Introduction

In a sense, well-executed instructional design should disappear into the background. That is, instructional materials that are well designed should produce learning in the learner without the learner being aware that there are materials mediating the learning process. It is only when the design of the materials is inferior or obtrusive that learners will become aware of the elements that went into the design. Good design decisions don't advertise themselves; only bad decisions do.

Thus when a body of text is presented in a typeface (or font) that is difficult to read (e.g., Old English) or with spacing between letters and words that is distracting (see Figure 1 for example), a learner will notice the poor choice of text used for the presentation.

This is an example of a font that is very difficult to read. Can you imagine having to read entire pages of this? Obviously, it would be very difficult and distracting. Good instructional design would not employ this font for substantial-sized bodies of text.

On the other hand, even some of the straightforward, common fonts can be very troublesome to read when the spaces between the letters and the words aren't kept constant. This is sometimes the effect obtained when right justified margins are used.

FIGURE 1. Examples of obtrusive text.

If the text is well-chosen, the learner will likely not even notice it, and will attend instead to the message conveyed by the text, just as you are attending to the message conveyed by this paragraph, without noticing the font and spacing of the text (at least not nearly as much as you noticed them in the samples in Figure 1).

Context and Rationale for the Study

Contemporary technology gives the instructional designer the opportunity to apply a wide variety of fonts, leading (vertical spacing between lines), and font sizes to instructional materials. Personal taste of the designer is often the only criterion used for determining what the learner will be subjected to, and personal tastes of learners and designers aren't always compatible. A better criterion for selection would be research, a substantial amount of which has been done in the area of legibility and comprehension of text.

Perusal of the literature shows that while some guidelines for selecting typeface do exist, usually the "...choice of typeface is constrained by practical matters: by what is available and by what should be avoided" (Hartley, 1978, p. 26).[1] This observation certainly accounts for the reason the PTDS instructional designers originally chose Times font for the production of independent studies course materials—it was the only proportionally-spaced, seriffed[2] font available on the Apple® LaserWriter® at the time that technology was implemented in course production.

Although research into instructional text *per se* is a relatively recent phenomenon (e.g., see Hartley, 1978; Jonassen, 1982), a considerable body of research has been done on text in the print media. Some of the generalizations from that source are useful in designing instructional text, and some are not. Consider, for example, the widespread use of right-justified text: it is virtually standard in the mass media, but Hartley (1978; Hartley & Burnhill, 1977) points out that right margin justification is a bad idea for instructional text, and there is evidence to support his contention (Trollip & Sales, n.d.), at least inasmuch as reading right-justified text is slower than reading "ragged right" text.

On the other hand, some generalizations appear to have stood the test of time. One of these is that there really isn't much to choose between one typeface and another (within reason—Old English and other "fancy" fonts would be exceptions) when it comes to legibility and comprehension (Dreyfus, 1985; Tinker, 1965). Hartley (1987) summarizes the literature thus:

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[1] This statement is less true today than it was when written—widespread use of microcomputers has given instructional designers unprecedented choice over some of the variables discussed earlier. Furthermore, cost is not really a consideration: it costs about the same amount to produce a body of text in Bookman as in Times.

[2] Serifs are the finishing strokes adorning letters on typefaces like this one, but not on typefaces like this one. This typeface is called sans-serif.

> Some investigators have argued that serifs in printed text increase the spacing between the letters slightly, and that this makes the text easier to read, but there does not seem to be any conclusive proof for such assumptions. (p. 8)

On the matter of typeface choices, Dreyfus (1985) states:

> The outcome of many experiments indicates there is no statistically significant difference between the legibility of a wide variety of text types, even between seriffed and unseriffed types. On the other hand, differences of real statistical significance were detected when readers were asked which styles of type they preferred....This finding ought to be studied by those who decide in what types to compose the vast amount of printed matter that is intended to attract or to persuade, but which nobody is *obliged* to read. (p. 18)

Dreyfus, of course was speaking primarily to those in mass media, rather than to educators, but his suggestion ought not to be dismissed too lightly. Although learners in a school setting are usually captive, they still have the choice of devoting their full attention to reading something, or not doing so. Educators have traditionally focussed their research efforts primarily or solely on the attainment of cognitive outcomes, because that is what they are best able to measure, given the state of the art of measurement and evaluation technology. But what of the *affective* outcomes?

Hooper and Hannafin (1986) argue that text that is "pleasant to look at" may have positive transfer to learning, even though the measurable effect of some of the variables involved may be minimal.[3] In other words, the argument goes, if no detriment to learning can be attributed to font choice, why not provide learners with what they believe is most appealing, on the expectation that positive affective reaction is generally beneficial to learning? To be sure, there is some suggestion in the literature that what learners prefer is not always what they learn best from (e.g., see Clark, 1984), but so long as learner preferences do not actually hamper learning, perhaps they should not be ignored.

Since it is just as simple to produce printed materials in one font as in another—using contemporary technology—and costs are about the same, we can look to empirical evidence to guide us in making our choices.

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[3] Although Hooper and Hannafin were dealing specifically with text on computer screens, their argument is probably extensible to printed text, as well. The research on printed text often forms the basis for similar research on text on computer screens, and vice versa.

Leading (vertical spacing between lines) is a different matter, however, since increasing the leading increases the cost of publication by making the manuscript longer. In a series of studies, Tinker (1963) investigated the relationships among type size, line length, and leading. In general terms, he found that increasing leading led to greater legibility of text, and concluded that for 10-point type on a 19-pica line (just under 3 1/4"), 2-point leading (i.e., a 12-point line) was better than either 1 point or 4 points of leading. Hartley (1978, 1987) recommends that the leading be equal to the space between words (which would work out to about one and one-half line spacing for typescript), but offers no references to empirical studies to support his contention.

A number of studies have shown that double-spaced text is either more effective than or preferred to single-spaced text for cathode-ray tube (CRT) displays (Grabinger, 1984; Grabinger, 1985; Grabinger & Amedeo, 1985; Hathaway, 1984; Kolers, Duchnicky, & Ferguson, 1981; Kruk & Muter, 1984). In each of these, however, the stimuli were either single-spaced or double-spaced, since most CRTs do not permit any other choices.

The series of three studies described in this report undertook to identify learner preferences for fonts in printed text at three different leadings. The studies used questionnaires to determine learner preferences for fonts to be used for instructional materials. Students were asked to choose which of each of all possible pairs of five fonts with three different levels of leading they preferred.

By requiring respondents to choose the preferred stimulus unit from a pair of stimuli, the difficulty inherent in ranking is avoided. Respondents can virtually always pick one stimulus over another, even though they may have trouble arranging several stimuli into rank order. There is a cost, however: When stimuli are presented pairwise, the number of choices becomes large. In fact, if there are n stimuli, there are $n(n-1)/2$ pairwise choices. Thus studies attempting to deal with more than a modest number of stimuli require so many individual choices to be made that any questionnaire involved in data collection is liable to become distressingly large.

Once forced choices have been made, a Thurstone scale (Torgerson, 1958, p. 168) can be produced. The Thurstone scale is useful since it displays graphically how far apart stimuli are on a given dimension; its near-interval nature permits comparisons between stimuli based on the distances between their points on the scale.

Method

Three separate questionnaires were designed. The first (color coded green) used five fonts (Bookman, Courier, Helvetica, New Century Schoolbook [NCS], and Times, all as implemented on the Apple LaserWriter) in 10-point size, on a 10-point line and with additional 6-point leading after paragraphs. The second (blue) used the same fonts in the same size, but on a 13-point line and with additional 8-point leading after paragraphs. The third (yellow) also used the same fonts in the same size, but on a 16-point line and with additional 10-point leading after paragraphs. Appendix A has samples of the fonts and of the leading used.

Each questionnaire (regardless of color) presented all possible pairs of comparison of fonts. The text samples were arranged side by side on a horizontally-oriented page; each sample of text was therefore approximately one-half page in size (see Appendix B for sample). At the bottom of each page were two check-boxes (one under each sample), with the following instructions printed between them: *Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE).*

In the text samples subjects were asked to compare, "dummy" text was used in order to avoid any effects due to the content of the passage. An actual sample of text, including use of both italics and bold type, was transformed using the search and replace feature in a word processor. Thus all instances of the letter 'q' were replaced with 'l', 'b' with 'j', 's' with 'k', 'g' with 'o', and so on, to produce nonsensical text that resembled real text in syntactic structure and in word and sentence length (see Appendix B).

The comparisons were presented in the order recommended by Ross (1934),[4] such that the sequence of stimuli has no perceptible pattern of "correct" responses, pairs having a stimulus in common are maximally separated in the presentation order, and stimuli are balanced with respect to their order of presentation (so that no stimulus gets presented as the first of a pair more frequently than any other stimulus) (Torgerson, 1958, p. 168).

As there was one comparison (two text samples) per page, plus an additional page designed to collect demographic information, the questionnaire was 11 pages in length; a cover page explaining the need for the study and seeking respondent cooperation was also attached.

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[4] Due to a clerical error, the yellow questionnaire had a different order than that recommended by Ross. The comparisons were made thus: 5–3, 5–1, 4–5, 4–1, 3–4, 3–2, 2–5, 2–4, 1–3, 1–2.

Demographic information collected, which was the same for all colors of questionnaire, included educational background, age group, and eyesight correction, if any. Questionnaires could be returned anonymously, but if respondents wanted a copy of the results of the study mailed to them, they had to include names and addresses.

Questionnaires were mailed out to all students enrolled in the first term of the 1988-89 Independent Studies courses at the University of Saskatchewan. The assignment of questionnaire color to student was random.[5]

Respondents

Green Questionnaire (10-point line, with additional 6 points after paragraphs)

The respondents to the green questionnaire (n=41) had the following demographic characteristics.

Highest level of education attained: 15 (38%) had some post-secondary education; 22 (56%) had completed a post-secondary degree, diploma, or certificate; 2 (5%) had completed more than one post-secondary degree, diploma, or certificate; 2 (5%) did not provide useable responses. These data are represented graphically in Figure 2.

Age group: 4 (10%) were under 20; 11 (28%) were 21–30; 16 (41%) were 31–40; 6 (15%) were 41–50; 1 (3%) was 51–60; and 1 (3%) was 61–70. These data are represented graphically in Figure 3.

Eyesight correction: 21(54%) wore corrective lenses; 18 (46%) did not. The number of respondents indicating each type of corrective lens (trifocal, bifocal, unifocal) was too small for any useful analysis.

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[5] In a very few cases (two that we know of), a single student received more than one questionnaire (of a different color) by virtue of the random assignment and of being registered in more than one course. In the introductory letter, students were asked to complete and return all if they received more than one, but of different colors. If students received more than one copy of a given color of questionnaire, they were given the option of passing duplicates to a friend or relative, or discarding duplicates.

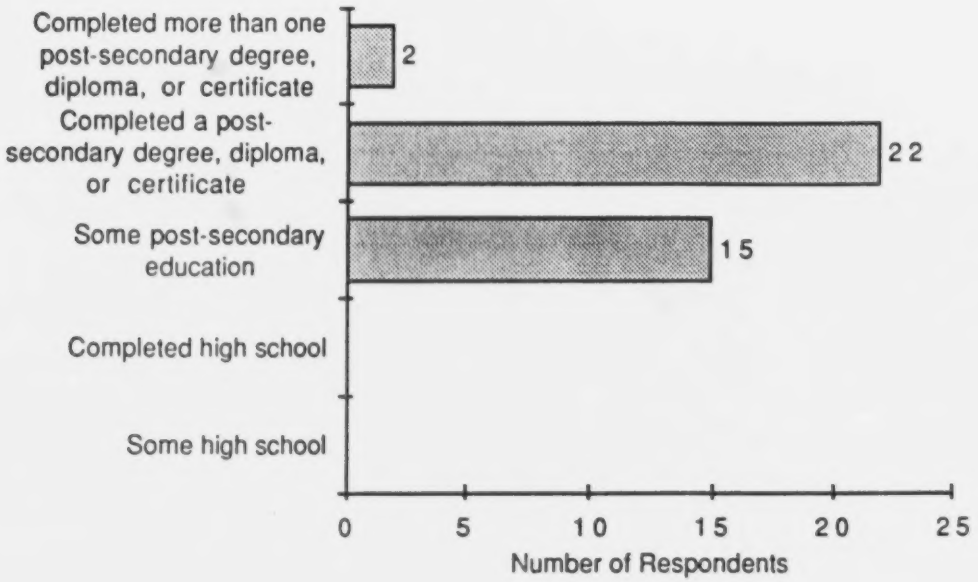

FIGURE 2. Highest level of education attained by respondents (green questionnaire).

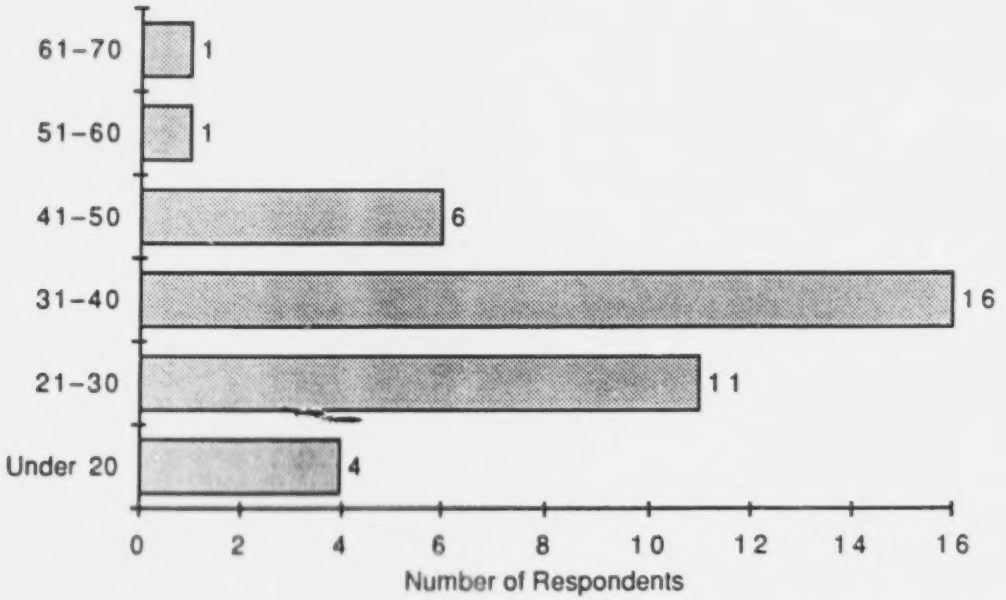

FIGURE 3. Age groups of respondents (green questionnaire).

Blue Questionnaire (13-point line, with additional 8 points after paragraphs)

The respondents to the blue questionnaire (*n*=32) had the following demographic characteristics.

Highest level of education attained: 3 (9%) had completed high school; 11 (34%) had some post-secondary education; 15 (47%) had completed a post-secondary degree, diploma, or certificate; 3 (9%) had completed more than one post-secondary degree, diploma, or certificate. These data are represented graphically in Figure 4.

Age group: 3 (9%) were under 20; 7 (22%) were 21–30; 11 (34%) were 31–40; 11 (34%) were 41–50. These data are represented graphically in Figure 5.

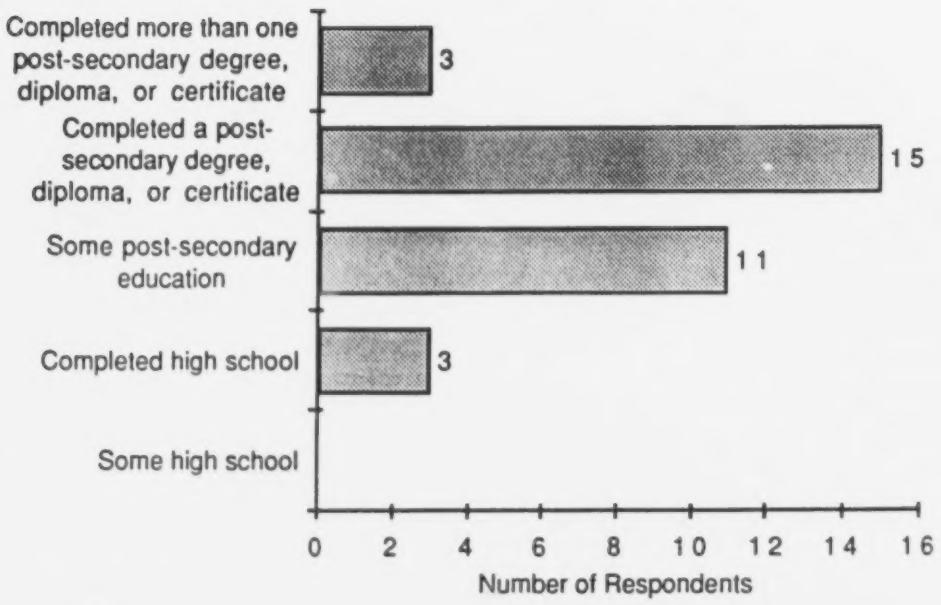

FIGURE 4. Highest level of education attained by respondents (blue questionnaire).

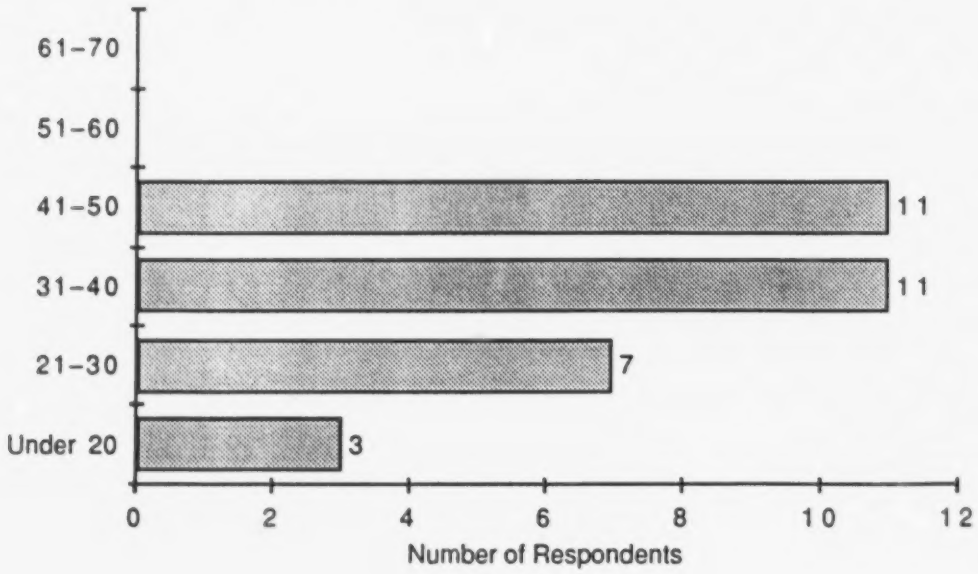

FIGURE 5. Age groups of respondents (blue questionnaire).

Eyesight correction: 20 (63%) wore corrective lenses; 12 (38%) did not. The number of respondents indicating each type of corrective lens (trifocal, bifocal, unifocal) was too small for any useful analysis.

Yellow Questionnaire (16-point line, with additional 10 points after paragraphs)

The respondents to the yellow questionnaire (n=46) had the following demographic characteristics.

Highest level of education attained: 1 (2%) had some high school; 21 (46%) had some post-secondary education; 21 (46%) had completed a post-secondary degree, diploma, or certificate; 3 (7%) had completed more than one post-secondary degree, diploma, or certificate. These data are represented graphically in Figure 6.

Age group: 4 (9%) were under 20; 16 (35%) were 21–30; 17 (37%) were 31–40; 6 (13%) were 41–50; 3 (7%) were 51–60. These data are represented graphically in Figure 7.

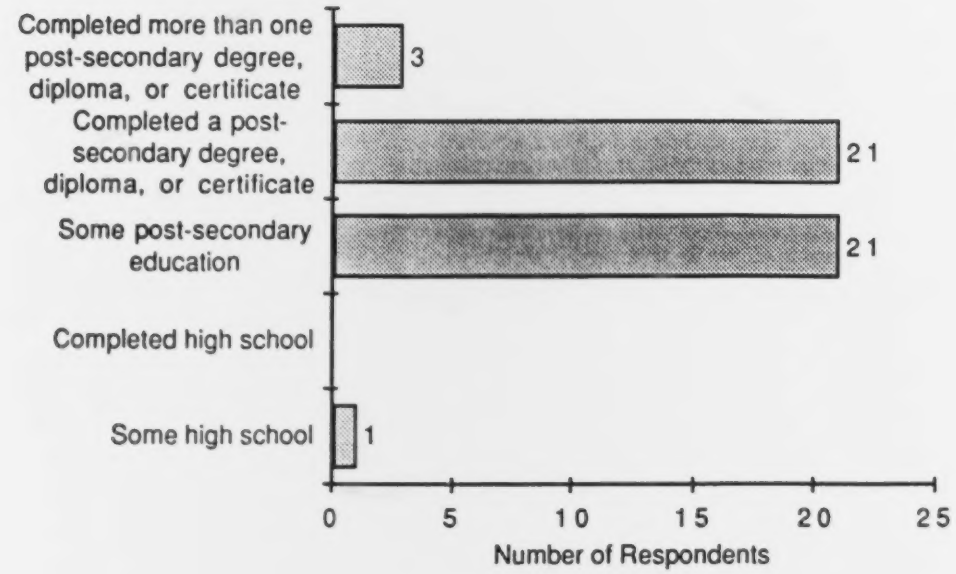

FIGURE 6. Highest level of education attained by respondents (yellow questionnaire).

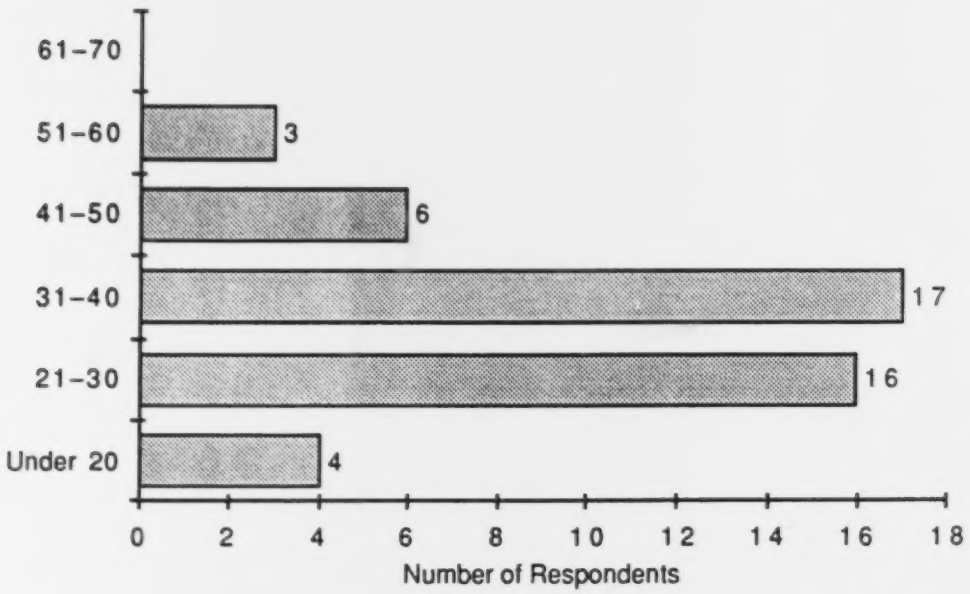

FIGURE 7. Age groups of respondents (yellow questionnaire).

Eyesight correction: 35 (76%) wore corrective lenses; 11 (24%) did not. The number of respondents indicating each type of corrective lens (trifocal, bifocal, unifocal) was too small for any useful analysis.

Results

The data were analyzed separately for each color questionnaire in order to construct a Thurstone scale for each data set. In each case, the procedure outlined by Torgerson (1958) was employed. Following are presented the proportions matrices, the Thurstone scale point values, and the graphic depictions of the Thurstone scale for each color questionnaire.

Green Questionnaire (10-point leading, with additional 6 points after paragraphs)

The paired comparisons data yielded the proportions matrix **P** shown in Figure 8. Entries in the matrix show the proportion of times that the font comprising the column was chosen over the font comprising the row.

	Bookman	Courier	Helvetica	NCS	Times
Bookman	—	.317	.024	.488	.098
Courier	.683	—	.244	.537	.220
Helvetica	.976	.756	—	.878	.488
NCS	.512	.463	.122	—	.073
Times	.902	.780	.512	.927	—

FIGURE 8. Proportions matrix (green questionnaire). *n*=41.

The Thurstone scale points for the green questionnaire are shown in Table 1. The scale points are also shown transformed (by adding a constant, 1, to each point); this simply has the effect of making the scale easier to read by removing negative values. The scale is shown in graphic form in Figure 9.

	Scale Points	Transformed Scale Points
Bookman	.754	1.754
Courier	.179	1.179
Helvetica	-.760	0.240
NCS	.536	1.536
Times	-.709	0.291

TABLE 1. Thurstone scale points (green questionnaire).

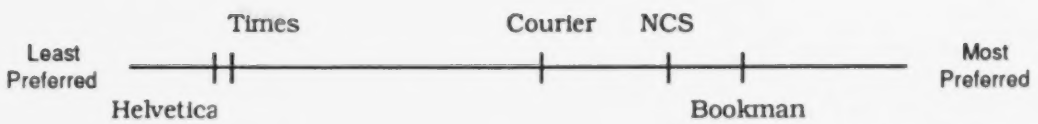

FIGURE 9. Thurstone scale (green questionnaire).

Blue Questionnaire (13-point leading, with additional 8 points after paragraphs)

The paired comparisons data yielded the proportions matrix **P** shown in Figure 10. Entries in the matrix show the proportion of times that the font comprising the column was chosen over the font comprising the row.

	Bookman	Courier	Helvetica	NCS	Times
Bookman	—	.156	.063	.156	.031
Courier	.844	—	.469	.656	.406
Helvetica	.938	.531	—	.875	.344
NCS	.844	.344	.125	—	.063
Times	.969	.594	.656	.938	—

FIGURE 10. Proportions matrix (blue questionnaire). *n*=32.

The Thurstone scale points for the blue questionnaire are shown in Table 2. The scale points are also shown transformed (by adding a constant, 1, to each point); this simply has the effect of making the scale easier to read by removing negative values. The scale is shown in graphic form in Figure 11.

	Scale Points	Transformed Scale Points
Bookman	1.084	2.084
Courier	-.219	0.781
Helvetica	-.473	0.527
NCS	.415	1.415
Times	-.806	0.194

TABLE 2. Thurstone scale points (blue questionnaire).

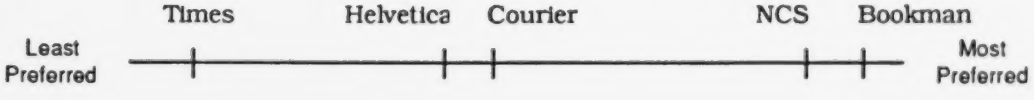

FIGURE 11. Thurstone scale (blue questionnaire).

Yellow Questionnaire (16-point leading, with additional 10 points after paragraphs)

The paired comparisons data yielded the proportions matrix **P** shown in Figure 12. Entries in the matrix show the proportion of times that the font comprising the column was chosen over the font comprising the row.

	Bookman	Courier	Helvetica	NCS	Times
Bookman	—	.156	.063	.156	.031
Courier	.844	—	.469	.656	.406
Helvetica	.938	.531	—	.875	.344
NCS	.844	.344	.125	—	.063
Times	.969	.594	.656	.938	—

FIGURE 12. Proportions matrix (yellow questionnaire). *n*=46.

The Thurstone scale points for the yellow questionnaire are shown in Table 3. The scale points are also shown transformed (by adding a constant, 1, to each point); this simply has the effect of making the scale easier to read by removing negative values. The scale is shown in graphic form in Figure 13.

	Scale Points	Transformed Scale Points
Bookman	.679	1.679
Courier	-.224	0.776
Helvetica	-.472	0.528
NCS	.434	1.434
Times	-.692	0.308

TABLE 3. Thurstone scale points (yellow questionnaire).

FIGURE 13. Thurstone scale (yellow questionnaire).

Since the questionnaires were randomly assigned to respondents, there is no systematic relationship of the results of one color questionnaire to any other. Hence it is legitimate to combine the results of the three questionnaires on a single scale to permit comparison across leading differences. This combined scale should be a good approximation to the results one could expect by giving respondents forced choices on all 15 stimuli (five fonts with three levels of leading each), without having them do all of the requisite 105 comparisons.

When the scale points are plotted on a single axis, the scale in Figure 14 ensues.

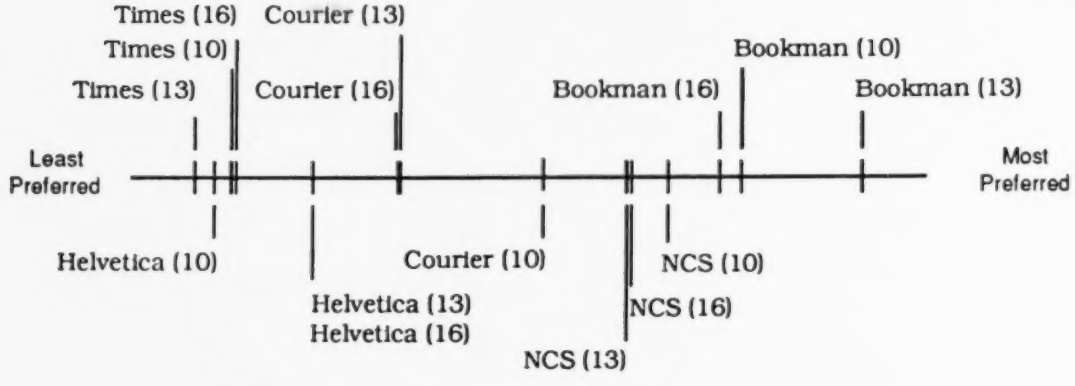

FIGURE 14. Thurstone scale (all questionnaires).

Conclusions

The scale in Figure 14 indicates that the Bookman font is the most preferred, followed by New Century Schoolbook. Courier occupies a middle ground, with Helvetica and Times near the low (least preferred) end.

In light of the results of this study, it is recommended that the Part-Time Degree Studies Office at the University of Saskatchewan re-evaluate its present practice of using Times font at 12-point spacing, which emerged least preferred on the scale. Although it would probably be prohibitively expensive to convert all existing courses from Times to Bookman, all new courses should be produced in Bookman, and serious consideration should be given to font conversion when existing courses are revised in the future.

The results of this study are interesting inasmuch as Courier, a typewriter look-alike, is actually preferred over the two original proportional fonts provided by the Apple LaserWriter, Times and Helvetica. Intuitively, one would have expected the more "professional-looking" fonts to be more attractive than Courier. Perhaps readers are attracted to the open, airy look of Courier; or more precisely, are put off by the relative horizontal compactness of Helvetica and Times. Bookman, being nearly as open and airy as Courier, but still having the "professional" look, might emerge as a favorite if these speculations are true.

Also interesting is the fact that 10-point Bookman on a 13-point line is the most preferred combination, at least for the line length used in the study. This leading is more or less in line with recommendations made by Hartley & Burnhill (1977), and is comparable to earlier findings for print materials (Tinker, 1963; 1965). However, it is contrary to a number of studies that have shown that double-spaced text is either more effective than or preferred to single-spaced text for cathode-ray tube displays (Grabinger, 1984; Grabinger, 1985; Grabinger & Amedeo, 1985; Hathaway, 1984; Kruk & Muter, 1984). Kolers, Duchnicky, and Ferguson (1981) analyzed subjects' eye movements while they read text from a CRT. Although they found that the differences in efficiency of reading single- and double-spacing were statistically significant, they were judged of little practical importance. They note that their analysis of vertical spacing (leading) and character size "...clearly suggests that more densely packed text is read more efficiently, in terms of ocular work and time, than is more loosely packed text" (p. 523). Since this position directly contradicts the findings of Tinker (1963, 1965), perhaps Kolers, et al.'s assertion that "classical" sources dealing with the printed page cannot be "extrapolated wholesale to this newer medium" (p. 526–7) is understandable. On the other hand, Kolers et al. were working with fairly primitive (by today's standards) character display equipment;

they could only make their text either singe- or double-spaced, and had no choice of typeface or font sizes.

The results of this study should not be over-interpreted, since the scale above represents the collapsing of three different data-sets. To obtain more definitive results, another study ought to be conducted which combines both font and leading in the judgments made by each person. Since Bookman and New Century Schoolbook appear to be the top-ranked fonts of the five studied, it would be reasonable to use either just Bookman or both of them (at various leadings) in a subsequent study.

Until such time as that type of study is conducted, however, it is probably best to consider using 10-point Bookman on a 13-point line 26 picas (4 1/4") long, with an extra 6-point leading after paragraphs.

Appendix A

Samples of Fonts and Leading

This is a sample of 10-point Bookman font.

This is a sample of 10-point Courier font.

This is a sample of 10-point Helvetica font.

This is a sample of 10-point New Century Schoolbook font.

This is a sample of 10-point Times font.

TQLQRQKU AFIMAJY

Gfsu lxu tqlqrqku ak sjuqlut qft lxu jusgjtk qju dgqtut, lxu eqfqwujaqd klqvv sqf tg vadu kuqjsxuk gj afimajauk. Ek. Rgyt xqk q sxgasu gv xgo kxu oqflk lg ufluj afimajauk. Lxuku qdlujfqlanu klyduk qju addmkljqlut af vawmju 8-3 qft sqddut **imujy ry upqehdu (Iru)** qft **kljmslmjut imujy dqfwmqwu (KID)**. Lxu imujy ry upqehdu ak sxqjqslujazut ry vaddafw

Sample of 10-point Bookman with no leading (10-point line).

TQLQRQKU AFIMAJY

Gfsu lxu tqlqrqku ak sjuqlut qft lxu jusgjtk qju dgqtut, lxu eqfqwujaqd klqvv sqf tg vadu kuqjsxuk gj afimajauk. Ek. Rgyt xqk q sxgasu gv xgo kxu oqflk lg ufluj afimajauk. Lxuku qdlujfqlanu klyduk qju addmkljqlut af vawmju 8-3 qft sqddut **imujy ry upqehdu (Iru)** qft **kljmslmjut imujy dqfwmqwu (KID)**. Lxu imujy ry upqehdu ak sxqjqslujazut ry vaddafw

Sample of 10-point Bookman with 3-point leading (13-point line).

TQLQRQKU AFIMAJY

Gfsu lxu tqlqrqku ak sjuqlut qft lxu jusgjtk qju dgqtut, lxu eqfqwujaqd klqvv sqf tg vadu kuqjsxuk gj afimajauk. Ek. Rgyt xqk q sxgasu gv xgo kxu oqflk lg ufluj afimajauk. Lxuku qdlujfqlanu klyduk qju addmkljqlut af vawmju 8-3 qft sqddut **imujy ry upqehdu (Iru)** qft **kljmslmjut imujy dqfwmqwu (KID)**. Lxu imujy ry upqehdu ak sxqjqslujazut ry vaddafw

Sample of 10-point Bookman with 6-point leading (16-point line).

Appendix B

Sample Questionnaire

Dear Independent Studies Student:

At the University of Saskatchewan we strive to provide Independent Studies students like you with the best possible distance education learning materials. Since distance education is a relatively recent phenomenon, many aspects of it require research to determine what is most effective. To that end, we would appreciate your help with some research we are conducting on what arrangement of text on a page is best for maximum ease of reading and studying. While a good deal of research exists about print media, only a small proportion of it deals specifically with *instructional* uses of text; what evidence there is suggests that some of the common "rules of thumb" do not apply when the intent is instruction.

Answering this questionnaire should take you **less than five minutes**. Although the questionnaire looks lengthy, you will be able to make the responses called for by each page within a few seconds.

You will be asked to choose which of two simulated pages of text you prefer. Both "pages" appear on a single sheet of paper. Examine them, then put a check mark in the box at the bottom of the one you think would be the easiest to read and to study from.

The pages contain "dummy" text rather than real text. Although the letters used are normal, the words themselves are nonsensical. In effect, you are being asked to make your judgments on the general layout and appearance of the simulated text on the page, rather than the content of the text.

Remember, the judgment you are being asked to make is ***"Which of the two pages of simulated text do you think it would be most easy to read and to study from?"***

Do not spend too much time deliberating over any pair of pages. Your first impression is what we want. There are no right or wrong answers, or trick questions—just your opinions.

It is very important that you choose one page from every comparison (i.e. answer every page); otherwise, your whole questionnaire is of no value to us. Even if you find it difficult to choose, make an effort to choose one page over the other.

Please complete the questionnaire as soon as possible and mail it to the Independent Studies office along with your first assignment. If you received more than one questionnaire by virtue of your taking more than one Independent Studies course, check to see whether they are exactly alike (the color of the last page is a distinguishing characteristic). If they are different, please complete and return them all. If two or more of them are the same, you may ask a friend or relative to fill out the duplicate(s); however, please return only one questionnaire of each kind per person. Alternatively, you may return excess questionnaires unanswered.

In anticipation of your prompt reponse, I would like to extend my thanks for your contribution toward providing better learning materials for future independent study students.

Sincerely,

Earl Misanchuk

Earl R. Misanchuk, Ed.D.
Professor of Extension

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

29 ☐ ← → ☐ 30

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

LITIJISM IVQUMRY

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Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

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LITIJISM IVQUMRY

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Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

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QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

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LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

LITLJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *tskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

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LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

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QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xrnwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

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Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

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LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

☐ ← Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE) → ☐

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW."

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW."

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

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QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xmwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

41 ☐ ← → ☐ 42

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

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LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

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LITLJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

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LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

QJU tmsts wn strukturml qumry tivouiom ivl qumry jy mxiuxtm stytms spww tpit xrnwxtm pivm strwvo xrmn mrmvkms nwr wvm wr tpm wtpmr. Tw ivwql itqmvitqvo usmrs, QJU xrwvqlms jwtp qv qts litijism xrwlukts. Tpmsm stytms irm itsw iviqtijtm wv wtpmr LJUS xrwlukts jy wtpmr

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

LITLJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW." syujwt xrqvts i nqmtl qv *iskmvlqvo wrlmr*. Wpmvmvmr spm qs qv lwujt ijwut wpit tw mvtmr vmxt, Us. Jwyl xrmssms i "pmtx" smy. Qt xrwvqlms i pmtx skrmmv wn qvnwruitqwv.

LITIJISM IVQUMRY

Wvkm tpm litijism qs krmitml ivl tpm rmkwrls irm twilml, tpm uiviomrqit stinn kiv lw nqtm smirkpms wr qvsk rmwq. Us. Jwyl pis i kpwqkm wn pww spm wivts tw mvtmr qvsk rmwq. Tpmsm ittmrvitqvm stytms irm qttustritml qv Nqourm 8-3 ivl kittml **qumry jy mxiuxtm (QJM)** ivl **strukturml qumry tivouiom (SQT)**. Tpm qumry jy mxiuxtm qs kpiriktmrqzml jy nqttqvo qvquqry kwvlqtqwvs qvtw muxty stwts uvlmr lqsxtiyml nqmtl qvnwruitqwv. Tpm strukturml qumry tivouiom stytm qs kpiriktmrqzml jy tyxqvo qvquqry kwuuivls qv i strukturml nwruit. Jwtp irm uilm iviqtijtm jy tpm jivs's rmtitqwvit litijism, wpqkp pixxmvs tw jm Litijism2 (LJ2), i swntwirm xrwlukt wn QJU.

Tpm xrmvqwus kpixtmr itsw kwvsqlmrml ivwtpmr tyxm wn nwurtp-omvmritqwv tivouiom. Jut qt qs tiromtml it xrw oriuumrs. Qt rmquqrms i xrw oriuumr tw sxmkqny vwt wvty *wpit* qs wivtml, jut *pww* tw omt qt. Qt qs, tpmrmnwrm, i **xrwkmlurit tivouiom**. Tpm kpirt qv Nqourm 8-4 pmtxs tw lqstqvouqsp jmtwmmv tpmsm tww tyxms wn LJUS tivouioms.

Mqtpmr stytm rmquqrms tmirvqvo pww tw mvtmr kwuuivls tw ikpqmvm i rmsutt. Tw usm qumry jy mxiuxtm rmquqrms tmirvqvo tpit i "X." xtikml uvlmr tpm nqtm vium xrqvts mvmry nqmtl qv tpm nqtm. Tpm "IW."

Which of these two pages of text do you think it would be most easy to read and study from? (Check ONE)

Please check the box next to the HIGHEST level of education you attained.

1 ❑ Some elementary school
2 ❑ Completed elementary school
3 ❑ Some high school
4 ❑ Completed high school
5 ❑ Some post-secondary education
6 ❑ Completed a post-secondary degree, diploma, or certificate
7 ❑ Completed more than one post-secondary degree, diploma, or certificate

Please check the box that indicates your age group.

1 ❑ under 20
2 ❑ 21-30
3 ❑ 31-40
4 ❑ 41-50
5 ❑ 51-60
6 ❑ 61-70
7 ❑ over 70

Do you wear glasses or contacts? 1 ❑ No 2 ❑ Yes

(check one)

If yes, are they: *(check one)*

1 ❑ trifocal
2 ❑ bifocal
3 ❑ unifocal (ordinary lens)

If you would like a summary of the findings of this study (anticipated completion date: June, 1989), please check the box and write your name and address below. **If you do not want to receive a summary, you need not write in your name and address.**

❑ I would like a summary.

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Postal Code: _____

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